



Interpretive Naturalist Certification Program of Alaska

CERTIFICATION STANDARDS

Those seeking certification by INCPA must complete requirements in seven categories or “standards.” An overview of the Certification Standards is followed by more detailed explanations. Below each standard is a listing of approved training opportunities that candidates may attend to fulfill the certification requirements. Opportunities other than those identified here may be applied towards credit depending upon approval from the Anchorage Committee for Resource Education (ACRE), the certifying organization.

Once enrolled, candidates proceed through the program at their own pace. It is their responsibility to complete the documentation forms and submit them to ACRE. Original forms must be submitted in all cases except for the journal for Standard VII. Retain copies for personal records. Mail original forms and a copy of the journal only when a standard has been completed to: ACRE, P.O. Box 231642 Anchorage, AK 99523. Finally, portions of three Standards may be waived if certain requirements are met. Details of the waiver policy are listed below each standard. To apply for a waiver, complete a Request for Waiver form and return to ACRE.

Overview of Certification Standards

I. Orientation

This one-day workshop orients the candidate to the certification program and examines the following topics: Importance and Role of Interpretive Services, Scientific Knowledge and Methods, Understanding Your Audience, Field Research Skills, and Stewardship.

II. Education Knowledge and Techniques

Education Delivery and Interpretation Workshop; two curriculum workshops; two site-specific training sessions; and 20 hours shadowing experienced outdoor/science educators in the community.

III. Science Knowledge

Alaska Natural History Workshop; 30 hours of attending classes, workshops, lectures, instructional field trips, and conferences in the following areas: Earth Science, Physical/Chemical Science, and Biological Science.

IV. Field Techniques and Experience

Field Methods Workshop; 10 hours of participating in resource inventories, ecosystem monitoring efforts, or other scientific projects organized by a university, government agency, or community group.

V. Instruction Experience

A total of 60 hours of instruction experience with various audience groups.

VI. Stewardship Project

Community Leadership and Stewardship Workshop; 20 hours developing and leading a pre-approved project that involves the community and promotes environmental stewardship.

VII. Knowledge of Local Natural Resources and Facilities Site orientations at three education facilities in the community; visits to other facilities and local natural areas to complete Program Journal activities.

Detailed Certification Standards

I. Orientation

- ✧ This one-day workshop orients the candidate to the certification program and examines the following topics: Importance and Role of Interpretive Services; Scientific Knowledge and Methods; Understanding Your Audience; Field Research Skills; and Stewardship.

To register for an up-coming Orientation, contact the BLM Campbell Creek Science Center at 267-1247.

Waiver Policy: There is no waiver for this workshop.

II. Education Knowledge and Techniques

By completing this standard, candidates will become familiar with existing environmental education and science curricula and associated programs in the community. In addition, candidates will increase their knowledge of interpretation techniques for adapting educational messages to meet the needs of different audiences. Finally, candidates will gain insight into the educational process by observing seasoned instructors through shadowing experiences.

Workshops

- ✧ Candidates must attend the Education Delivery and Interpretation Workshop. To register, contact Lincoln Garrick at the Imaginarium, 276-3179. Additionally, a portion of staff training at the Begich-Boggs Visitor Center in May satisfies this requirement. To register, contact Leslie Murray, 754-2316.

Waiver Policy: There is no waiver for this workshop.

- ✧ Candidates must also attend two Curriculum Workshops from the following list. Please call the contact people for workshop times and dates.

Alaska Resources Curriculum: Minerals and Energy, Jason Brune, AK Resource Development Council/AMEREF, 276-0700.

Alaska Wildlife Curriculum, Robin Dublin, AK Dept. of Fish and Game, 267-2168.

Fire in Alaska, Matt Weaver, AK Dept. of Natural Resources, 269-8481

Project Learning Tree, Matt Weaver, AK Dept. of Natural Resources, 269-8481

Project Wild, Robin Dublin, AK Dept. of Fish and Game, 267-2168.

Waiver Policy: For either workshop, the requirement may be satisfied with documentation of attendance within the past five years. For those who have had the training longer than five years ago, and are currently using the curriculum, you may receive a waiver by contacting the respective curriculum coordinator for an appointment to receive updated materials and be informed of the changes that have occurred in the curriculum.

Site-Specific Training

- ✧ Candidates must attend a minimum of two training sessions at two separate sites. Sessions

must focus on programs specific to a particular organization. Please call the contact people for times and dates.

Adult Volunteer Training, Alaska Youth for Environmental Action, National Wildlife Federation, Polly Carr, 258-4825.

Bird Academy, Audubon Society, Bucky Dennerlein, 276-7034.

Day Camp Staff Training, Trailside Discovery, Tom Burek, 274-5437.

Interpretive Walk Training, Eagle River Nature Center, Asta Spurgis, 694-2108.

Teacher Training Program, Imaginarium, Lincoln Garrick, 276-3179.

Staff Training, BLM Campbell Creek Science Center, Brian Lax, 267-1249.

Volunteer Training, Imaginarium, Lincoln Garrick, 276-3179.

Wildlife Education Training, AK Dept. of Fish and Game, Lilly Goodman, 267-2216, lilly_goodman@fishgame.state.ak.us.

Waiver Policy: One of these training requirements may be waived with documentation of attendance within the last two years.

Shadow Experience

- * Candidates must complete a minimum of 20 hours of shadow experience at any of the following sites. The average duration of each program is indicated. Please call the contact people for program times and dates.

Alaska Dept. of Fish and Game, Wildlife Education programs (1/2-1 hour), Lilly Goodman, 267-2216, lilly_goodman@fishgame.state.ak.us

Anchorage Waterways Council: stream walks (1 hour), watershed orientations (1 hour), teacher trainings (6 hours); Meagan Boltwood, 743-1052.

Audubon Society: Bird Academy (2 day program, 6 hours/day), field trips (2 hours); Bucky Dennerlein for the Bird academy, 276-7034; George Matz for field trips, 345-3139, geomatz@gci.net.

BLM Campbell Creek Science Center: Earth Ranger Academy (3 day program, 6 hours/day), Design-A-Science Days and Standards-Based programs(2-6 hours), nature hikes (2 hours); Brian Lax, 267-1249.

Eagle River Nature Center: interpretive walks and programs (2 hours), Asta Spurgis, 694-2108.

Imaginarium: public demos (30 minutes), science classes (45 minutes), special events and teacher trainings (1-4 hours); Lincoln Garrick, 276-3179.

National Wildlife Federation: Alaska Youth for Environmental Action Civics and Conservation Summit and Summer Get-Together (week-long overnight); Youth Environmental Leadership Training (2-day overnight); Polly Carr, 258-4825.

Trailside Discovery: week-long day camp programs (7 hours/day), Tom Burek, 274-5437.

Waiver Policy: There is no waiver for this requirement.

III. Science Knowledge

By completing this standard, candidates will enhance their understanding of scientific methods and strengthen their knowledge of the life, physical, chemical and earth sciences.

Workshop

- ✳ Candidates must attend the Alaska Natural History Workshop. To register, contact Asta Spurgis at the Eagle River Nature Center, 694-2108 or Lilly Goodman at AK Dept. of Fish and Game, 267-2216. Additionally, attendance at the Alaska Natural History Symposium in the spring will fulfill this requirement. Contact Paul Twardock at Alaska Pacific University at 564-8254 or pault@alaskapacific.edu.

Waiver Policy: This requirement may be waived with documentation of university level courses or contributing work in the subject area in the past three years. Regardless of waiver eligibility, however, attendance is highly recommended.

Science Training

- ✳ Candidates must complete 30 hours of attendance at workshops, lectures, instructional field trips, conferences or courses in three areas: Life Science, Earth Science and Physical/Chemical Science. At least 10 hours must be completed in each area. Area A, Life Science includes biology, zoology, ecology, natural history and evolution. Area B, Earth Science includes geology, paleontology, hydrology and soil science. Area C, Physical/Chemical Science includes physics, chemistry and astronomy.

Candidates receive one hour of credit for every hour attending workshops, lectures, field trips and conference seminars. One university credit equals 8 hours toward certification. Non-credit courses such as those offered in community education programs equal 5 hours each toward certification. The following list of opportunities includes the science areas that may be covered as well as approximate lengths of time of the programs. This list is by no means complete. To obtain credit for programs not listed, submit course descriptions to ACRE for approval. Submission of a course syllabus may also be necessary.

Alaska Dept. of Fish and Game lectures, (A, times vary), Lilly Goodman, 267-2216, lilly_goodman@fishgame.state.ak.us

Alaska Native Plant Society lectures (A, 1 hour); field trips (A, times vary); Frank Pratt, 333-8212, frank@alaskakrafts.com.

Anchorage Waterways Council stream walks (A, B, C, 1 hour); teacher trainings (A, B, C, 6 hours); ENRI bioassessment training (A, 6-8 hours); water quality monitoring training (A, C, 12 hours); Meagan Boltwood, 743-1052.

Audubon Society field trips (A, times vary), George Matz, 345-3139, geomatz@pci.net.

BLM Campbell Creek Science Center Fireside Chats lecture series and Mid-Summer Night's Science Series (A, 1½ hours); Backyard Discoveries inventory trainings (A, times vary); Brian Lax, 267-1249, www.sciencecenter.ak.blm.gov.

Eagle River Nature Center natural history walks (A, 2 hours); lectures (A, B, 1½ hours); field trips (A, times vary); Asta Spurgis, 694-2108.

UAA Graduate and Research Lectures (A, B, C, 1½ hours), biology dept., 786-4770; physics/astronomy dept., 786-1238; geology dept., 786-6840 or Environment and Natural Resources Institute, 257-2700.
UAA/UAF spring lecture series at Loussac Library (A, B, C, 1½ hours), 786-1324.

Waiver Policy: Up to 24 of the 30 hours (up to 8 in any of the areas) may be waived with documentation of attendance at training opportunities or contributing work in the field within the past three years.

IV. Field Techniques and Experience

By completing this standard, candidates will understand and practice current techniques necessary for resource inventories and ecosystem monitoring efforts. Candidates will understand the role of these programs in the protection of natural resources and gain knowledge useful for educational programs.

Workshop

- * Candidates must attend the Field Methods Workshop. To register, contact Bucky Dennerlein at the National Audubon Society, 276-7034 or Fred Sorensen at the UAF Cooperative Extension Service, 786-6300.

Waiver Policy: This requirement may be waived with documentation of university-level courses or contributing work in this area in the past three years. Regardless of eligibility for a waiver, however, attendance is highly recommended.

Field Research Project

- * Candidates must document at least 10 hours of involvement in a natural resource inventory, ecosystem monitoring effort or other scientific project organized by a university, governmental agency or community group. Following is a partial list of acceptable projects available in the community. Candidates may participate in other projects upon approval from ACRE. Eligible projects must reflect the process of scientific thought and methods and provide a summary of written protocols and quality controls.

Anchorage Waterways Council, Meagan Boltwood, 743-1052: water quality monitoring, creek bioassessment, development permit monitoring.

Audubon Society, Bucky Dennerlein, 276-7034: Project Feeder Watch, Christmas Bird Count.

BLM Campbell Creek Science Center/Campbell Tract, Brian Lax, 267-1249: water quality monitoring, creek bioassessment, insect and plant collection and curation, Fourth of July Butterfly Count, migratory bird banding, spring breeding bird survey, Limits of Acceptable Change survey.

Eagle River Nature Center, Carole Lloyd, 694-2108: Fourth of July Butterfly Count, butterfly collection and curation.

UAF Cooperative Extension Service, Fred Sorensen, 786-6300: home environmental assessments.

Waiver Policy: There is no waiver for this category.

V. Instruction Experience

By completing this standard candidates will gain critical experience as instructors. Instruction opportunities include working with a variety of audiences and emphasize a hands-on learning approach with a variety of organizations.

- ✱ Candidates must document at least 60 hours instructing science and environmental education programs. At least 10 hours must be spent instructing each of three of the four audience categories below. These 30 hours must also be spent instructing programs for at least 2 organizations. The remaining 30 hours of instruction are at the candidate's discretion. Hours include preparation as well as active instruction.

Audience Categories

Youth (Y): students from grades pre-school through high school. This may be school groups, camps, daycare, youth groups, etc.

Families (F): any audience that comprises both youth and adults. This may be a program designed for families or public programs that attract a multi-aged audience.

Adults (A): includes any combination of students above 18 years of age.

Special Needs Groups (SN): includes audiences which have physical or mental disabilities as well as "youth-at-risk."

Instruction Opportunities

Alaska Dept. of Fish and Game, Lilly Goodman, 267-2216,
lilly_goodman@fishgame.state.ak.us, Wildlife Education programs (Y, F, A, SN).

Anchorage Waterways Council, Meagan Boltwood, 743-1052: stream walks (Y, F, A); watershed orientations (F, A); teacher trainings (A).

Audubon Society, Bucky Dennerlein, 276-7034: Bird Academy (Y); George Matz, 345-3139: field trips (F).

BLM Campbell Creek Science Center, Brian Lax, 267-1249: Earth Ranger Academy (Y); Design-A-Science Days (Y, A); Standards-Based programs (Y)

nature hikes (Y, F, A).

Eagle River Nature Center, Asta Spurgis, 694-2108: interpretive walks and programs (Y, F, A).

Imaginarium, Lincoln Garrick, 276-3179: public demonstrations (F); science classes (Y, A); special events and teacher trainings (Y, F, A).

National Wildlife Federation, Polly Carr, 258-4825: Alaska Youth for Environmental Action Civics and Conservation Summit (Y); Summer Get-Together (Y); Youth Environmental Leadership Training (Y).

Trailside Discovery, Tom Burek, 274-5437: week-long daycamp programs (Y).

Waiver Policy: Up to thirty hours of this requirement may be waived with documentation of instruction experience within the past two years.

VI. Stewardship Project

By completing this standard, candidates will understand the importance of fostering a sense of stewardship in the audiences that they serve. Candidates will learn to plan, organize and lead a stewardship project that benefits the community.

Workshop

- ✱ Candidates must attend the Community Leadership and Stewardship Workshop. To register, contact Meagan Boltwood at the Anchorage Waterways Council, 743-1052 or Polly Carr at the National Wildlife Federation, 258-4825.

Waiver Policy: There is no waiver for this requirement.

Stewardship Project

- ✱ Candidates must spend at least 20 hours organizing and leading a stewardship project to benefit local resources. A habitat restoration project, recycling effort, trail improvement, public education campaign or waterways clean up would satisfy this requirement. Before starting the project, candidates must receive approval from the certifying committee by completing the Stewardship Project Plan (Form 6A.) Upon completing the project, candidates must complete the Stewardship Project Report (Form 6B.) The following organizations can assist candidates with identifying stewardship projects to benefit local resources.

Anchorage Waterways Council, Meagan Boltwood, 743-1052.

Audubon Society, Bucky Dennerlein, 276-7034.

BLM Campbell Creek Science Center/Campbell Tract, Brian Lax, 267-1249.

Eagle River Nature Center, Asta Spurgis, 694-2108.

National Wildlife Federation, Polly Carr, 258-4825.

Trailside Discovery/Alaska Center for the Environment, Tom Burek, 274-5437.

UAF Cooperative Extension Service, Fred Sorensen, 786-6300.

Waiver Policy: There is no waiver for this requirement.

VII. Knowledge of Local Natural Resources and Facilities

By completing this standard, candidates will broaden their knowledge of and appreciation for the interpretive resources available in the community. These include human and natural resources as well as local science centers, visitor/interpretative facilities and educational tools. Candidates will be better able to take advantage of volunteer and employment opportunities; to inform the audiences they serve about resources in the community; to serve as ambassadors, when appropriate, for other programs and facilities; and to foster cooperation, coordination and communication among science and environmental education organizations.

Site Orientations

- ✱ Candidates must attend site orientations at three of the following education facilities in the community. This allows candidates an “insider’s view” of these facilities. Candidates will learn about the organization of local interpretive sites and have an opportunity to connect with those running the facilities. Contact the organizations below to set up orientations.

Anchorage Waterways Council, watershed orientation (conducted at area creeks),
Meagan Boltwood, 743-1052.

BLM Campbell Creek Science Center, 6881 Abbott Loop Rd., Anchorage, Brian
Lax, 267-1249.

Eagle River Nature Center, 32750 Eagle River Rd., Eagle River, Asta Spurgis,
694-2108.

Imaginarium, 737 W. 5th Ave., Anchorage, Lincoln Garrick, 276-3179.

National Wildlife Federation, 750 W. 2nd Ave. Suite 200, Anchorage, Polly Carr,
258-4825.

Waiver Policy: There is no waiver for this category.

Journal

- ✱ Applicants are required to visit at least four educational/interpretive facilities and libraries in the community and at least three natural areas. During these visits, candidates must complete the Local Resource Exploration Journal designed with activities to make the site visits more meaningful and interactive. Once complete, a copy of the journal should be sent to ACRE to document the site visits.

Waiver Policy: There is no waiver for this category.